(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization

International Bureau



(43) International Publication Date 28 April 2005 (28.04.2005)

PCT

(10) International Publication Number WO 2005/038015 A1

(51) International Patent Classification7:

C12N 5/06

(21) International Application Number:

PCT/US2004/032933

- (22) International Filing Date: 7 October 2004 (07.10.2004)
- (25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 60/510,344

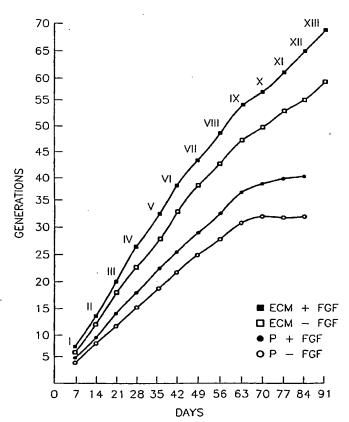
10 October 2003 (10.10.2003)

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- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU. AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,

[Continued on next page]

(54) Title: HUMAN CORNEAL ENDOTHELIAL CELLS AND METHODS OF OBTAINING AND CULTURING CELLS FOR CORNEAL CELL TRANSPLANTATION



(57) Abstract: A method for isolation of human corneal endothelial cells by non-enzymatic harvesting and culturing of endothelial cells in vitro from critical density in a system consisting of extracellular matrix protein coated plastic dishes and growth factor enriched culture medium are used to generate expanded sub-populations of endothelial cells for cell replacement procedures or transplantation in denuded donor corneas. Special procedures are included in the process for the removal of the native corneal endothelium from the donor corneas and the seeding of the culture corneal endothelial cells onto the denuded corneas for transplantation purposes.

WO 2005/038015 A1



FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PI, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

 before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

Published:

with international search report

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